Henrico County Residential Soils Testing Requirements (Effective 8/1/08)

Various areas of Henrico County have soils that may have a potential to shrink and/or swell with seasonal changes in moisture content. These soils may not be readily identifiable in the field by our inspectors but may be identifiable per the Henrico County GIS mapping system. For access to this information, please call your plan reviewer by dialing 501-4360 for Building Inspections and 501-7280 for the Permit Center.

To reduce the risk of structural problems to the house foundation, the Building Inspections Department requires a soils investigation for the following prior to issuing the building permit in those areas identified as having moderate or high potential shrink/swell soils as indicated by the USDA/VA TECH Soil Survey of Henrico County, or identified by other information as being located on fill and/or mine sites.

- 1. All new single family dwellings.
- **2.** Attached structures (including but not limited to additions, decks, screen porches, sunrooms, etc.).
- **3.** And detached light frame structures exceeding 600 square feet in area. **Note:** For sites outside of these areas, no special soil testing is required, unless unusual conditions are identified during site work or the footing inspection.

This investigation may be performed for an individual lot or subdivision basis. The resulting report is required to be sealed by a registered design professional and shall address the suitability of the proposed foundation(s) for the soils encountered and is to include any recommendations by the engineer to alleviate potential foundation problems. Exception: An engineered footing design is not required where the County soils map, soil scientist or engineer's soil test indicates a low shrink/swell potential.

Additional Notes:

- An existing soil report that was prepared for the original construction of a dwelling may be used for an addition. Please contact the original contractor to obtain a copy of this report.
- IRC code section R801.3 requires all dwellings have a controlled method of water disposal from the roofs in areas where expansive or collapsible soils are known to exist; i.e. moderate and high shrink swell soil areas. Discharge to the ground surface shall be at least 5 feet from the foundation wall. Roof drainage is not required for low potential shrink/swell soil areas unless the soils engineer's report specifies it.
- The site grading shall comply with IRC section R401.3. (Lots shall be graded so as to drain surface water away from the foundation wall and comply with the engineered footing design. The grade away from foundation walls shall fall a minimum of 6 inches within the first 10 feet)
- The County plan reviewer shall note when a soils report is attached to the approved plans.